RAW SEQUENCE LISTING

EFS

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10	1561	1,906			
Source:		-	19	JO	·	
Date Processed by STIC:			3/28	107		
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RAW SEQUENCE LISTING DATE: 03/28/2007 PATENT APPLICATION: US/10/561,906 TIME: 14:52:59

Input Set : N:\efs\03_28 07\10561906 efs\281642US0XPCTST25.txt

Output Set: N:\CRF4\03282007\J561906.raw

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3 <110> APPLICANT: Patek, Miroslav
        Elisakova, Veronika
 6 <120> TITLE OF INVENTION: FEEDBACK RESISTANT ACETOHYDROXY ACID SYNTHETHASE MUTANTS
 8 <130> FILE REFERENCE: 281642US0XPCT
10 <140> CURRENT APPLICATION NUMBER: US 10/561,906
11 <141> CURRENT FILING DATE: 2005-12-21
13 <150> PRIOR APPLICATION NUMBER: PCT/EP04/06157
14 <151> PRIOR FILING DATE: 2004-06-08
16 <150> PRIOR APPLICATION NUMBER: EP 03014640.1
17 <151> PRIOR FILING DATE: 2003-06-26
19 <160> NUMBER OF SEQ ID NOS: 12
21 <170> SOFTWARE: PatentIn version 3.3
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 519
25 <212> TYPE: DNA
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <223> OTHER INFORMATION: Synthetic DNA
32 <220> FEATURE:
33 <221> NAME/KEY: CDS
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38 Met Val Asn Ser Asp Val Thr Arg His Ile Leu Ser Val Leu Val Gln
39 1
41 gac gta gac gat gac ttt tcc cgc gta tca ggt atg ttc acc cga cgc
                                                                          96
42 Asp Val Asp Asp Asp Phe Ser Arg Val Ser Gly Met Phe Thr Arg Arg
               20
                                   25
45 gca ttc aac ctc gtg tcc ctc gtg tct gca aag acc gaa aca cac ggc
                                                                         144
46 Ala Phe Asn Leu Val Ser Leu Val Ser Ala Lys Thr Glu Thr His Gly
                               40
49 atc aac cgc atc acg gtt gtt gtc gac gcc gac gag ctc aac att gag
                                                                         192
50 Ile Asn Arg Ile Thr Val Val Val Asp Ala Asp Glu Leu Asn Ile Glu
                           55
53 cag atc aac aag cag ctc aac aag ctg atc ccc gtg ctc aaa gtc gtg
                                                                         240
54 Gln Ile Asn Lys Gln Leu Asn Lys Leu Ile Pro Val Leu Lys Val Val
                       70
57 cga ctt gat gaa gag acc act atc gcc cgc gca atc atg ctg gtt aag
                                                                         288
58 Arg Leu Asp Glu Glu Thr Thr Ile Ala Arg Ala Ile Met Leu Val Lys
59
61 gtc tct gcg gac agc acc aac cgt ccg cag atc gtc gac gcc gcg aac
                                                                         336
62 Val Ser Ala Asp Ser Thr Asn Arg Pro Gln Ile Val Asp Ala Ala Asn
63
               100
                                   105
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Output Set: N:\CRF4\03282007\J561906.raw

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65 atc ttc cgc gcc cga gtc gtc gac gtg gct cca gac tct gtg gtt att
                                                                         384
66 Ile Phe Arg Ala Arg Val Val Asp Val Ala Pro Asp Ser Val Val Ile
           115
                               120
69 gaa tcc aca ggc acc cca ggc aag ctc cgc gca ctg ctt gac gtg atg
                                                                         432
70 Glu Ser Thr Gly Thr Pro Gly Lys Leu Arg Ala Leu Leu Asp Val Met
                           135
       130
73 gaa caa ttc gaa atc cgc gaa ctg atc caa tcc gga cag att gca ctc
                                                                          480
74 Glu Gln Phe Glu Ile Arg Glu Leu Ile Gln Ser Gly Gln Ile Ala Leu
                       150
                                            155
77 aac cgc ggt ccg aag acc atg gct ccg gcc aag atc taa
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78 Asn Arg Gly Pro Lys Thr Met Ala Pro Ala Lys Ile
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82 <210> SEQ ID NO: 2
83 <211> LENGTH: 172
84 <212> TYPE: PRT
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Synthetic Construct
90 <400> SEQUENCE: 2
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96 Asp Val Asp Asp Asp Phe Ser Arg Val Ser Gly Met Phe Thr Arg Arg
               20
                                   25
100 Ala Phe Asn Leu Val Ser Leu Val Ser Ala Lys Thr Glu Thr His Gly
104 Ile Asn Arg Ile Thr Val Val Val Asp Ala Asp Glu Leu Asn Ile Glu
                            55
108 Gln Ile Asn Lys Gln Leu Asn Lys Leu Ile Pro Val Leu Lys Val Val
                        70
112 Arg Leu Asp Glu Glu Thr Thr Ile Ala Arg Ala Ile Met Leu Val Lys
                    85
                                        90
116 Val Ser Ala Asp Ser Thr Asn Arg Pro Gln Ile Val Asp Ala Ala Asn
                                    105
120 Ile Phe Arg Ala Arg Val Val Asp Val Ala Pro Asp Ser Val Val Ile
                                120
124 Glu Ser Thr Gly Thr Pro Gly Lys Leu Arg Ala Leu Leu Asp Val Met
                            135
                                                 140
128 Glu Gln Phe Glu Ile Arg Glu Leu Ile Gln Ser Gly Gln Ile Ala Leu
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132 Asn Arg Gly Pro Lys Thr Met Ala Pro Ala Lys Ile
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136 <210> SEQ ID NO: 3
137 <211> LENGTH: 519
138 <212> TYPE: DNA
139 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:
142 <223> OTHER INFORMATION: Synthetic DNA
145 <220> FEATURE:
146 <221> NAME/KEY: CDS
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PATENT APPLICATION: US/10/561,906 TIME: 14:52:59

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Output Set: N:\CRF4\03282007\J561906.raw

	<222> LOCATION: <400> SEQUENCE:								
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	Met Ala Asn Ser								
152		5	10	Dea Der var i	15				
	gac gta gac ggt	gac ttt tcc	= -	ggt atg ttc a					
	Asp Val Asp Gly								
156	20		25	-	30				
	gca ttc aac ctc	ata tee ete							
	Ala Phe Asn Leu								
160	35		40	45	-				
162	atc aac cgc atc	acg gtt gtt	gtc gac gcc	gac gag ctc a	ac att gag 192				
163	Ile Asn Arg Ile	Thr Val Val	Val Asp Ala	Asp Glu Leu A	asn Ile Glu				
164	50	5 5		60					
166	cag atc acc aag	cag ctc aac	aag ctg atc	ccc gtg ctc a	aa gtc gtg 240				
167	Gln Ile Thr Lys	Gln Leu Asn	Lys Leu Ile	Pro Val Leu I	ys Val Val				
168	65	70		75	80				
	cga ctt gat gaa								
	Arg Leu Asp Glu		_	Ala Ile Met I	_				
172		85	90		95				
	gtc tct gcg gac								
	Val Ser Ala Asp		_	-					
176			105		.10				
	atc ttc cgc gcc								
180	Ile Phe Arg Ala 115	Arg var var	ASP VAI AIA	125	vai vai lie				
	gaa tcc aca ggc	שכב ככש ממכ			ac gtg atg 432				
	Glu Ser Thr Gly								
184	130	135	_,0 _ca 9	140	op var 1,00				
	gaa cca tcc gga		ctg atc caa		itt qca ctc 480				
	Glu Pro Ser Gly								
	145	150		155	160				
190	aac cgc ggt ccg	aag acc atg	gct ccg gcc	aag atc taa	519				
191	Asn Arg Gly Pro	Lys Thr Met	Ala Pro Ala	Lys Ile					
192		165	170						
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196 <211> LENGTH: 172									
	<212> TYPE: PRT								
	<213> ORGANISM:	Artificial	Sequence						
200 <220> FEATURE:									
201 <223> OTHER INFORMATION: Synthetic Construct									
	<400> SEQUENCE:								
	Met Ala Asn Ser	Asp val Thr	_	Leu Ser Val I					
206		Jan Dha Carr	10	Cl. Mat Dha m	15 The Ara Ara				
209	Asp Val Asp Gly	Asp rne ser		_	_				
	Ala Phe Asn Leu	Val Car Lou	25 Wal Ser Ala		o Thr His Cly				
213		var ser neu	40	Lys Int Giu i	iii iiis Giy				
	Ile Asn Arg Ile	Thr Val Val			sn Tle Glu				
2 1 /	TIC ADM ATG THE	THE VOL VOL	ANT WED WIN	TISP OTA BEA R	Di IIC GIU				

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Output Set: N:\CRF4\03282007\J561906.raw

```
218
                            55
        50
221 Gln Ile Thr Lys Gln Leu Asn Lys Leu Ile Pro Val Leu Lys Val Val
                        70
225 Arg Leu Asp Glu Glu Thr Thr Ile Ala Arg Ala Ile Met Leu Val Lys
                    85
229 Val Ser Ala Asp Ser Thr Asn Arg Pro Gln Ile Val Asp Ala Ala Asn
                100
                                    105
233 Ile Phe Arg Ala Arg Val Val Asp Val Ala Pro Asp Ser Val Val Ile
                                120
                                                     125
237 Glu Ser Thr Gly Thr Pro Gly Lys Leu Arg Ala Leu Leu Asp Val Met
                                                 140
                            135
241 Glu Pro Ser Gly Ile Ala Glu Leu Ile Gln Ser Gly Gln Ile Ala Leu
                        150
245 Asn Arg Gly Pro Lys Thr Met Ala Pro Ala Lys Ile
                                         170
                    165
249 <210> SEQ ID NO: 5
250 <211> LENGTH: 17
251 <212> TYPE: DNA
252 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <223> OTHER INFORMATION: Synthetic DNA
257 <400> SEQUENCE: 5
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258 gcggaggaag tactgcc
261 <210> SEQ ID NO: 6
262 <211> LENGTH: 22
263 <212> TYPE: DNA
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Synthetic DNA
269 <400> SEQUENCE: 6
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270 caatcagatt aattgctgtt ta
273 <210> SEQ ID NO: 7
274 <211> LENGTH: 26
275 <212> TYPE: DNA
276 <213> ORGANISM: Artificial Sequence
278 <220> FEATURE:
279 <223> OTHER INFORMATION: Synthetic DNA
281 <400> SEQUENCE: 7
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282 ggacgtagac ggtgacattt cccgcg
285 <210> SEQ ID NO: 8
286 <211> LENGTH: 19
287 <212> TYPE: DNA
288 <213> ORGANISM: Artificial Sequence
290 <220> FEATURE:
291 <223> OTHER INFORMATION: Synthetic DNA
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294 gtttagaact tggccggag
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298 <211> LENGTH: 20
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PATENT APPLICATION: US/10/561,906

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Input Set : N:\efs\03_28_07\10561906_efs\281642US0XPCTST25.txt

Output Set: N:\CRF4\03282007\J561906.raw

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299 <212> TYPE: DNA
300 <213> ORGANISM: Artificial Sequence
302 <220> FEATURE:
303 <223> OTHER INFORMATION: Synthetic DNA
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310 <211> LENGTH: 57
311 <212> TYPE: PRT
312 <213> ORGANISM: Corynebacterium glutamicum
314 <400> SEQUENCE: 10
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317 1
320 Asp Val Asp Gly Ile Ile Ser Arg Val Ser Gly Met Phe Thr Arg Arg
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                                    25
324 Ala Phe Asn Leu Val Ser Leu Val Ser Ala Lys Thr Glu Thr His Gly
           35
328 Ile Asn Arg Ile Thr Val Val Asp
329 50
332 <210> SEQ ID NO: 11
333 <211> LENGTH: 53
334 <212> TYPE: PRT
335 <213> ORGANISM: S. cinnamonensis
337 <400> SEQUENCE: 11
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                                        10
343 Val Leu Ala Arg Ile Thr Ala Leu Phe Ser Arg Arg Gly Phe Asn Ile
      20
                                    25
347 Asp Ser Leu Ala Val Gly Val Thr Glu His Pro Asp Ile Ser Arg Ile
           35
                                40
351 Thr Ile Val Val Asn
352
       50
355 <210> SEQ ID NO: 12
356 <211> LENGTH: 57
357 <212> TYPE: PRT
358 <213> ORGANISM: Escherichia Coli
360 <400> SEQUENCE: 12
362 Met Gln Asn Thr Thr His Asp Asn Val Ile Leu Glu Leu Thr Val Arg
                                        10
366 Asn His Pro Gly Val Met Thr His Val Cys Gly Leu Phe Ala Arg Arg
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25

370 Ala Phe Asn Val Glu Gly Ile Leu Cys Leu Pro Ile Gln Asp Ser Asp

35

50

375

20

374 Lys Ser His Ile Trp Leu Leu Val Asn

VERIFICATION SUMMARY

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Input Set : N:\efs\03_28_07\10561906_efs\281642US0XPCTST25.txt
Output Set: N:\CRF4\03282007\J561906.raw